of the facialis, vagus and accessorius with their nerves, also the recurrent and the muscles of the larynx and vocal cords were all intact. The paralysis of the vocal cord and of the facialis on the left is therefore connected with the cortical lesion in the right hemisphere, and that of the vocal cord is associated with the defect in the island of Reil or neighboring portion of the parietal lobe.

Ricerche anatomo-comparative sulla distribuzione delle arterie nella superficie encephalica di alcuni mammiferi. R. STADERINI. Atti della R. Accademia dei Fisiocritici, Siena, Serie IV., Vol. 2; 1889.

For the determination of the superficial distribution of the cerebral arteries, the sheep, horse, dog, cat, rabbit, monkey and man were examined. In man and the monkeys the anterior cerebral artery supplies the two olfactory convolutions, the median portion of the orbital convolution, the entire mesial surface of the hemisphere cephalad of the medial portion of the parieto-occipital fissure, together with the superior frontal and half of the middle frontal convolutions and all of the superior parietal convolution. The middle cerebral artery supplies the remainder of the convexity of the hemisphere including the outer face and extremity of the temporal lobe, as well as the island of Reil. It may further send a branch to the middle portion of the occipital lobe. The posterior cerebral artery supplies the entire surface of the temporo-occipital lobe and the medial and lateral faces of the occipital lobe. In the other animals examined the anterior cerebral supplies the greater part of the olfactory lobe, (except in the case of the horse, in which the cephalic third of the olfactory lobe and a part of the frontal lobe are supplied by a cerebral branch of the opthalmic artery), the portion of the brain to which the cephalic extremity of this lobe is applied, the mesial face of the hemisphere, (except a small portion at the caudal extremity,) and the part corresponding to the sagittal convolution. The middle cerebral artery supplies the lateral and ventral faces of the hippocampal lobe and the entire lateral face of the hemisphere, with the exception of the sagittal convolution and the extreme caudal portion of the hemisphere. The posterior cerebral artery supplies the mesial face of the hippocampal convolution, that portion of the surface which lies over the cerebellum, and finally the most caudal portion of the hemisphere.

Ein Hydrocephalus ungewöhnlichen Umfangs. Dr. F. TUCZEK und Dr. AUGUST CRAMER. Arch. f. Psychiatrie und Nervenkrankheiten. Bd. XX. H. 2. 1889. 1 Taf.

The authors give an unusually thorough and concise statement of the appearance and dimensions of both skull and brain in the case of a hydrocephalic patient, the horizontal circumference of whose head was 75 cm. Patient, a male, was normal at birth, but during the first year the head became noticeably large and the lower extremities failed to develop normally. At the age of 29 years he became an inmate of the Landeshospital Haina, where he remained until his death from decubitus suddenly developed, in 1887. The physical examination made at entrance into the hospital showed him normal and fairly developed, save in the two particulars just mentioned. The animal functions were good. He was cleanly, good-natured, free from delusions, could speak slowly, but at the same time clearly, and could sing, had a good memory, for persons at least, though he had had no mental training, never having attended school. In general was rather weak minded; showed no sensory disturbances and could use his hands well, even for sewing, etc.

The skull was found of considerable thickness. Dura adherent to the roof. The latter was thick and heavy. In removing brain 1850 cu. cm. of fluid were collected, after which the brain, with remaining fluid, weighed 1600 grams. The horizontal circumference of the fresh

brain was 67.5 cm., and the greatest breadth 20 cm. Hemispheres with thin walls which collapsed on withdrawal of the fluid. The main portion of the specimen was hardened in bichromate and preserved in alcohol, while small portions of one hemisphere were prepared by other more special methods. The gyri were unusually long and broad, well rounded, though but slightly prominent, the sulci very shallow. The lateral ventricles were enormously enlarged; the hemispheres thin-walled, and showing at places on the internal surface ridges of medullary substance. Corpus callosum and fornix were represented by the merest remnants; the septum lucidum by its pedunculi. The third ventricle was much enlarged, and the soft commissure was wanting. The hemispheral wall was from $\frac{1}{2}$ to 4 cm. thick; the cortex 2—3 mm. thick. A centrum ovale did not exist. Careful measurements are given of the basal ganglia, interbrain, midbrain, hind-brain, and after-brain—all symmetrical. A microscopical examination of the cortex by the methods of Exner and Weigert showed a normal development of the fibers, save that those of the first (zonal) layer were unusually slender. The ganglion cells were abundant and no change in them, even in the motor regions, could be determined. The pathological changes in the crura and parts lying caudad were the complete obliteration of the central canal and degeneration in the pyramidal tracts. The great slenderness of the first layer of cortical fibers is explained as the result of stretching. The cortical speech center was incompletely developed. The secondary degeneration of the pyramidal tracts was associated with the loss of the subcortical medullary substance, as has been shown in other cases of hydrocephalus, with paralysis and contracture. Degeneration in the cord mainly affected the fibers for the lower limbs, as was to be expected, and with this was also associated the very poor development of the central gyri in their dorsal third.

Ueber Hirngewichte bei Geistesschwachen. WULF. XXIII Jahresversammlung des Vereins Hannover'scher und Westphälischer Irrenärzte zu Hannover, Mai, 1889. Abstracts by Bruns in Neurolog. Centralbl., No. 10, 1889.

The result of weighing 205 brains of idiots and imbeciles is given as follows:

1. Average weight in men greater than in women. 2. Average weight in cases of mental weakness is less than in any other form of mental disease, except, perhaps, general paralysis in women. 3. In mental weakness the brain reaches its maximal weight earlier (earlier too in men than in women) than in normal individuals or those suffering from other forms of mental disease; the decrease in weight also commences earlier. 4. The weights of the fore-brain have the same relation as those of the entire brain, both in men and women. 5. The weight of the cerebellum is abnormally small, and small, too, relatively to that of the fore-brain and the entire brain. 6. In relation to the size and weight of the body the weight is as in normal persons, *i. e.*, in general the brain weight increases with the size and weight of the body. On the other hand, there is relatively an inverse relation in that persons of small body weight have a relatively heavier brain and *vice versa*. The same is true in relation to the height. 7. Epileptics with mental weakness have a smaller brain than those not epileptics. Measurements of the head showed that mental weakness was strongly associated with brachycephalic skulls.

Ein Beitrag zur Kenntniss der feineren pathologischen Anatomie der Idiotie. H. KÖSTER. Neurolog. Centralbl., No. 10, 1889.

A brief review of the literature of the anatomy of the brains of idiots is followed by a short account of K. A. S. whose arrested development